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Substitute for form 1615, 1615A, 1615B

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

of

11

Complete if Known

Application Number	09/921,645
Filing Date	August 3, 2001
First Named Inventor	Meade, Thomas
Group Art Unit	1637
Examiner Name	Strzelecka, Teresa, Ph.D.

Attorney Docket Number

A-64411-2/RFT/RMS/RMK

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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	U.S. Patent Document Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
A0	4,704,193		11/1987	Bowers et al.	
A1	4,707,352		11/1987	Stavrianopoulos	
A2	4,707,440		11/1987	Stavrianopoulos	
A3	4,711,955		12/1987	Ward et al.	
A4	4,755,458		7/1988	Rabbani et al.	
A5	4,787,963		11/1998	MacConnell	
A6	4,840,893		6/1989	Hill et al.	
A7	4,849,513		7/1989	Smith et al.	
A8	4,868,103		9/1989	Stavrianopoulos et al.	
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A12	4,952,685		8/1990	Stavrianopoulos	
A13	4,994,373		2/1991	Stavrianopoulos	
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A27	5,403,451		4/1995	Riviello et al.	
A28	5,436,161		7/1995	Bergstrom et al.	

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				Filing Date	August 3, 2001
				First Named Inventor	Meade, Thomas
				Group Art Unit	1637
				Examiner Name	Strzelecka, Teresa, Ph.D.
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A29	5,443,701		8/1995	Willner et al.	
A30	5,449,767		9/1995	Ward et al.	
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A35	5,571,568		11/1996	Ribi et al.	
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A46	5,770,369		6/1998	Meade et al.	
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A49	5,780,234		7/1998	Meade et al.	
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A51	5,837,859		11/1998	Teoule et al.	
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A55	6,087,100		7/2000	Meade et al.	
A56	6,096,825		8/2000	Garnier	

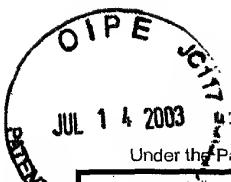
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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
Sheet	3	of	11	Application Number	09/921,645
				Filing Date	August 3, 2001
				First Named Inventor	Meade, Thomas
				Group Art Unit	1637
				Examiner Name	Strzelecka, Teresa, Ph.D.
				Attorney Docket Number	A-64411-2/RFT/RMS/RMK

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	A57	6,177,250	1/2001	Meade et al.	
	A58	6,180,352	1/2001	Meade et al.	
	A59	6,200,761	3/2001	Meade et al.	
	A60	6,207,369	B1	Wohlstadter et al.	
	A61	6,238,870		Meade et al.	

FOREIGN PATENT DOCUMENTS						
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	B1	EP 0 234 938	A2	2/1987	Cranfield Inst. of Tech.	
	B2	EP 0 229 943	B1	7/1987	Molecular Biosystems Inc.	
	B3	EP 0 599 337	A2	1/1994	Canon Kabushiki Kaisha	
	B4	EP 0 063 879	A2	11/1982	Yale University	
	B5	EP 0 515 615		Boehringer Nannheim		
	B6	CA 2 090 904	A1	9/1993	F. Hoffman-La Roche	
	B7	JP 238,166	A	1988	Mitsubishi Corp.	Abstract
	B8	JP 6-41183	A2	1994	Mitsubishi Corp.	
	B9	WO 86/05815	A1	3/1985	Genentech International Inc.	
	B10	WO 90/05732	A1	5/1990	Columbia Univ.	
	B11	WO 92/10757	A1	6/1992	Boehringer Mannheim	
	B12	WO 93/22678	A2	11/1993	Mass Inst. of Tech.	
	B13	WO 93/10267	A1	5/1993	IGEN, Inc.	
	B14	WO 94/22889	A1	10/1994	Cis Bio International	
	B15	WO 95/15971	A2	6/1995	Calif. Inst. of Technology	
	B16	WO 96/40712	A1	12/1996	Calif. Inst. of Technology	
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	B19	WO 97/27329	A1	7/1997	Univ. of Chicago	
	B20	WO 98/27229	A1	6/1998	Univ. of Chicago	

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				First Named Inventor	Meade, Thomas
				Group Art Unit	1637
				Examiner Name	Strzelecka, Teresa, Ph.D.
Sheet	4	of	11	Attorney Docket Number	A-64411-2/RFT/RMS/RMK

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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FOREIGN PATENT DOCUMENTS

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	B21	WO 98/28444 A2	7/1998	Univ. of Chicago		
	B22	WO 98/35232 A2	8/1998	Univ. of N. Carolina		
	B23	WO 99/67425 A2	12/1999	Clinical Micro Systems		
	B24	WO 99/14596 A1	3/1999	AB Sangtec Medical		
	B25	WO 99/37819 A2	7/1999	Clinical Micro Systems		
	B26	EP 0 589 867 B1	4/1996	Pharmacia Biosensor		
	B27	WO 90/05303 A1	5/1990	Pharmacia AB		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	C1	AIZAWA, et al., "Integrated Molecular Systems for Biosensors," Sensors and Actuators B Chemical, B 24-25:1-5 (1995)	
	C2	ALBERS, et al., "Design of Novel Molecular Wires for Realizing Long-Distance Electron Transfer," Biochemistry and Bioenergetics, 42:25-33 (1997).	
	C3	ALLEMAN, K.S., et al., "Electrochemical Rectification at a Monolayer-Modified Electrode," J. Phys. Chem., 100:17050-17058 (1996).	
	C4	ARKIN, et al. "Evidence for Photoelectron Transfer Through DNA Intercalation," J. Inorganic Biochem. Abstracts, 6th International Conference on Bioinorganic Chemistry, 51(1) & (2):526 (1993).	
	C5	BARISCI, et al., "Conducting Polymer Sensors," TRIP, 4(9):307-311 (1996)	
	C6	BAUM, R. M., "Views on Biological, Long-Range Electron Transfer Stir Debate," C&EN, pp 20-23 (1993).	
	C7	BECHTOLD, R., et al., "Ruthenium-Modified Horse Heart Cytochrome c: Effect of pH and Ligation on the Rate of Intramolecular Electron Transfer between Ruthenium(II) and Heme(III)," J. Phys. Chem., 90(16):3800-3804 (1986).	
	C8	BEATTIE, et al., "Genosensor Technology," Clinical Chemistry, 39(4): 719-722 (1993).	
	C9	BIDAN, "Electroconducting conjugated polymers: new sensitive matrices to build up chemical or electrochemical sensors. A Review," Sensors and Actuators, B6:45-56 (1992).	
	C10	Biotechnology and Genetics: Genetic Screening Integrated Circuit," The Economist (February 25-March 3, 1995).	
	C11	BLONDER, et al., "Three-dimensional Redox-Active layered Composites of Au-Au, Ag-Ag and Au-Ag Colloids," Chem. Commun. 1393-1394 (1998).	
	C12	BOGUSLAVSKY, L. et al., "Applications of redox polymers in biosensors," Solid State Ionics, 60:189-197 (1993).	
	C13	BAMDAD, C. "A DNA self-assembled monolayer for the specific attachment of unmodified double - or single stranded DNA," Biophysical Journal, 75:1997-2003 (1988).	

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Sheet	5	of	11	Filing Date	August 3, 2001
				First Named Inventor	Meade, Thomas
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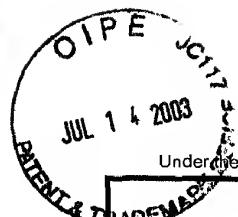
OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			
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	C15	BRUN, A. M., et al., "Photochemistry of Intercalated Quaternary Diazaaromatic Salts," <i>J. Am. Chem. Soc.</i> , 113:8153-8159 (1991).			
	C16	BUMM, et al., "Are Single Molecular Wires Conducting?," <i>Science</i> 271:1705-1707 (1996).			
	C17	CANTOR, C.R., et al., "Report on the Sequencing by Hybridization Workshop," <i>Genomics</i> , 13:1378-1383 (1992).			
	C18	CARR, et al., "Novel Electrochemical Sensors for Neutral Molecules," <i>Chem. Commun.</i> , 1649-1650 (1997).			
	C19	CARTER, et al., "Voltammetric Studies of the Interaction of Metal Chelates with DNA. 2. Tris-Chelated Complexes of Cobalt(III) and Iron(II) with 10-Phenanthroline and 2,2'-Bipyridine," <i>J. Am. Chem. Soc.</i> , 111:8901-8911 (1989).			
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	C21	CHIDSEY, et al., "Coadsorption of Ferrocene-Terminated and Unsubstituted Alkanethiols on Gold" Electroactive Self-Assembled Monolayers," <i>J. Am. Chem. Soc.</i> , 112:4301-4306 (1990).			
	C22	CHIDSEY, C.E.D., et al., "Free Energy and Temperature Dependence of Electron Transfer at the Metal Electrolyte Interface," <i>Science</i> , 251:919-922 (1991).			
	C23	CHRISSEY, et al., "Covalent attachment of synthetic DNA to self-assembled monolayer films," <i>Nucleic Acids Research</i> , 24(15):3031-3039 (1996).			
	C24	CLERY, "DNA Goes Electric," <i>Science</i> , 267:1270 (1995).			
	C25	Commerce Business Daily Issue of September 26, 1996 PSA#1688.			
	C26	DAVIS, L. M., et al., "Electron Donor Properties of the Antitumour Drug Amsacrine as Studied by Fluorescence Quenching of DNA-Bound			
	C27	DAVIS, L. M., et al., "Elements of biosensor construction," <i>Enzyme Microb. Technol.</i> 17:1030-1035 (1995).			
	C28	DEGANI et al., "Direct Electrical Communication between Chemically Modified Enzymes and Metal Electrodes. 2. Methods for Bonding Electron-Transfer Relays to Glucose Oxidase and D-Amino-Acid Oxidase," <i>J. Am. Chem. Soc.</i> 110:2615-2620 (1988).			
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	C31	DEINHAMMER, R.S., et al., "Electronchemical Oxidation of Amine-containing compounds: A Route to the Surface Modification of glassy carbon electrodes," <i>Langmuir</i> , 10:1306-1313 (1994).			
	C32	DREYER, G. B., et al., "Sequence-specific cleavage of single-stranded DNA: Oligodeoxynucleotide-EDTA/Fe(II)," <i>Proc. Natl. Acad. Sci. USA</i> , 82:968-972 (1985).			
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	C33	DROBYSHEV, A., et al., "Sequence Analysis by Hybridization with Oligonucleotide Microchip: Identification of β -thalassemia Mutations," <i>Gene</i> , 188:45-52 (1997).			
	C34	DUBILEY, S., et al., "Fractionation, phosphorylation and Ligation on Oligonucleotide Microchips to Enhance Sequencing by Hybridization," <i>Nucleic Acids Research</i> , 25(12):2259-2265 (1997).			
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	C37	ELGHANIAN, et al., "Selective Colorimetric Detection of Polynucleotides Based on the Distance-Dependent Optical Properties of Gold Nanoparticles," <i>Science</i> , 277:1078-1081 (1997).			
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Sheet 7 of 11

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Application Number	09/921,645
Filing Date	August 3, 2001
First Named Inventor	Meade, Thomas
Group Art Unit	1637
Examiner Name	Strzelecka, Teresa, Ph.D.

Attorney Docket Number A-64411-2/RFT/RMS/RMK

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
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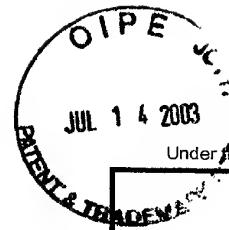
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				Application Number	09/921,645
				Filing Date	August 3, 2001
				First Named Inventor	Meade, Thomas
				Group Art Unit	1637
				Examiner Name	Strzelecka, Teresa, Ph.D.
Sheet	8	of	11	Attorney Docket Number	A-64411-2/RFT/RMS/RMK

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Application Number	09/921,645
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First Named Inventor	Meade, Thomas
Group Art Unit	1637
Examiner Name	Strzelecka, Teresa, Ph.D.

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Sheet	10	of	11	Filing Date	August 3, 2001
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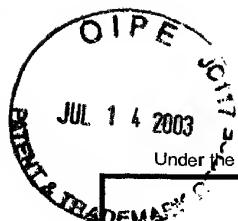
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	09/921,645
				Filing Date	August 3, 2001
				First Named Inventor	Meade, Thomas
				Group Art Unit	1637
				Examiner Name	Strzelecka, Teresa, Ph.D.
Sheet	11	of	11	Attorney Docket Number	A-64411-2/RFT/RMS/RMK

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	C122	WEBER, et al., "Voltammetry of Redox-Active Groups Irreversibly Adsorbed onto Electrodes. Treatment Using the Marcus Relation between Rate and Overpotential," <i>Anal. Chem.</i> , 66:3164-3172 (1994).
	C123	WILLIAMS, et al., "Studies of oligonucleotide interactions by hybridisation to arrays: the influence of dangling ends on duplex yield," <i>Nucleic Acids Research</i> , 22(8):1365-1367 (1994).
	C124	WINKLER, J. R., et al., "Electron Transfer in Ruthenium-Modified Proteins," <i>Chem. Rev.</i> , 92:369-379 (1992).
	C125	XU, et al., "Immobilization and Hybridization of DNA on an Aluminum(III) Alkanebisphosphonate Thin Film with Electrogenerated Chemiluminescent Detection," <i>J. Am. Chem. Soc.</i> , 117:2627-2631 (1995).
	C126	XU, et al., "Immobilization of DNA on an Aluminum(III) alkaneobisphosphonate Thin Film with Electrogenerated Chemiluminescent Detection," <i>J. Am. Chem. Soc.</i> , 116:8386-8387 (1994).
	C127	YANG, et al., "Growth and Characterization of Metal(II) Alkaneobisphosphonate Multilayer Thin Films on Gold Surfaces," <i>J. Am. Chem. Soc.</i> , 115:11855-11862 (1993).
	C128	YERSHOV, G. et al., "DNA Analysis and Diagnostics on Oligonucleotide Microchips," <i>Proc. Natl. Acad. Sci. USA</i> , 93:4913-4918 (1996).
	C129	ZHOU, et al., "Fluorescent Chemosensors Based on Energy Migration in Conjugated Polymers: The Molecular Wire Approach to Increased Sensitivity," <i>J. Am. Chem. Soc.</i> , 117:12593-12602 (1995).
	C130	BAIN, et al., "Formation of Monolayers by the Co-adsorption of Thiols on Gold: Variation in the Length of the Alkyl Chain," <i>J. Am. Chem. Soc.</i> , 111:7164-7175 (1989).
	C131	ZIMMERMANN, et al., "DNA stretching on functionalized gold surfaces." <i>Nucleic Acids Res.</i> 22(3):492-7 (1994).

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